

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/086,363	HASHIMOTO ET AL.	
	Examiner	Art Unit	
	Jared J. Fureman	2876	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1.  This communication is responsive to the RCE filed 6/12/2007 and the amendment filed 5/9/2007.

2.  The allowed claim(s) is/are 1-6 and 9-16.

3.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)  All    b)  Some\*    c)  None    of the:

1.  Certified copies of the priority documents have been received.

2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3.  Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4.  A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5.  CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.

(a)  including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached  
    1)  hereto or 2)  to Paper No./Mail Date \_\_\_\_\_.

(b)  including changes required by the attached Examiner's Amendment / Comment or in the Office action of  
    Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6.  DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

#### Attachment(s)

- |  |  |
|--|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application                      |
| 2. <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)  | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date <u>06/12/2002</u> | 7. <input type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material                     | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|  | 9. <input type="checkbox"/> Other _____.   |

*Jared J. Fureman*  
Jared J. Fureman  
Primary Examiner  
Art Unit: 2876

**DETAILED ACTION**

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/9/2007 has been entered. Claims 1-6 and 9-16 are pending.

***Allowable Subject Matter***

2. Claims 1-6 and 9-16 have been allowed over the prior art of record.

3. The following is a statement of reasons for allowance: The prior art of record, taken alone or in combination, fails to teach or fairly suggest: (re claim 1) a first positioning mark is provided on the substrate and a second positioning mark is provided on the optical fiber, the grating is positioned on the substrate by using the first and second positioning marks; (re claim 3) a first positioning mark is provided on the substrate and a second positioning mark is provided on the optical fiber, the grating is positioned with respect to the heater by using the first and second positioning marks; (re claim 13) a first positioning mark is provided on the substrate and a second positioning mark is provided on the optical fiber, the grating is positioned with respect to the heater by using the first and second positioning marks; (re claim 14) the steps of filling the gel substance in the groove or the strip-shaped member; accommodating the optical fiber in

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the groove of the strip-shaped member in which the gel substance is filled; mounting the strip-shaped member in which the gel substance is filled and the optical fiber is accommodated on the substrate on which the heater is mounted; and moving the strip-shaped member on the substrate so as to carry out a positioning of the groove with respect to the heater; (re claim 15) the steps of securing the strip-shaped member on the substrate on which the heater is mounted; filling the gel substance in the groove of the strip-shaped member secured on the substrate; inserting and accommodating the optical fiber in the groove of the strip-shaped member in which the gel substance is filled; and moving the optical fiber on the heater so as to carry out a positioning of the grating with respect to the heater; and (re claim 16) the steps of mounting the optical fiber on the heater which is mounted on the substrate; coating the optical fiber mounted on the heater with a gel substance; mounting the step-shaped member on the substrate and accommodating the optical fiber in the groove of the strip-shaped member; and moving the strip-shaped member on the substrate so as to carry out a positioning of the grating with respect to the heater; in combination with the other claimed limitations as set forth in the claims.

The admitted prior art teaches adjusting the optical fiber relative to the heater using positioning marks (see page 1, line 28 - page 3, line 8 of the specification). However, the admitted prior art fails to teach (among other claimed features) a positioning mark on the substrate and the grating is positioned using the first and second positioning marks.

The teachings of Chamberlain et al, Lauzon et al and Koyabu et al have been discussed in the previous office action (see the office action mailed on 2/12/2007).

Applicant's arguments, see page 13, filed 5/9/2007, with respect to Koyabu et al failing to teach a first positioning mark on a substrate and a second positioning mark provided on an optical fiber for positioning the grating on the substrate, have been fully considered and are persuasive. The 103(a) rejection of claims 1-6 and 9-13 has been withdrawn.

Thus, without the benefit of applicant's teachings, there is no motivation for one of ordinary skill in the art at the time of the invention to combine the various features from the prior art of record in a manner so as to create the claimed invention.

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Yamauchi (US 6,294,232 B1), Hashimoto et al (US 2002/0048430 A1), Miyamoto et al (US 2002/0037141 A1) and Mesaki et al (US 6,217,231 B1) all teach the use of positioning marks to align optical components.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jared J. Fureman whose telephone number is (571) 272-2391. The examiner can normally be reached on 8:00 am - 5:30 PM M-T, and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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August 20, 2007